INCH-POUND
MIL-DTL-21617/29
24 July 2003

DETAIL SPECIFICATION SHEET

CONNECTOR, RECEPTACLE ELECTRICAL, RECTANGLAR,
POLARIZED SHELL, MINIATURE TYPE,
BACK SHELLS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-DTL-21617.

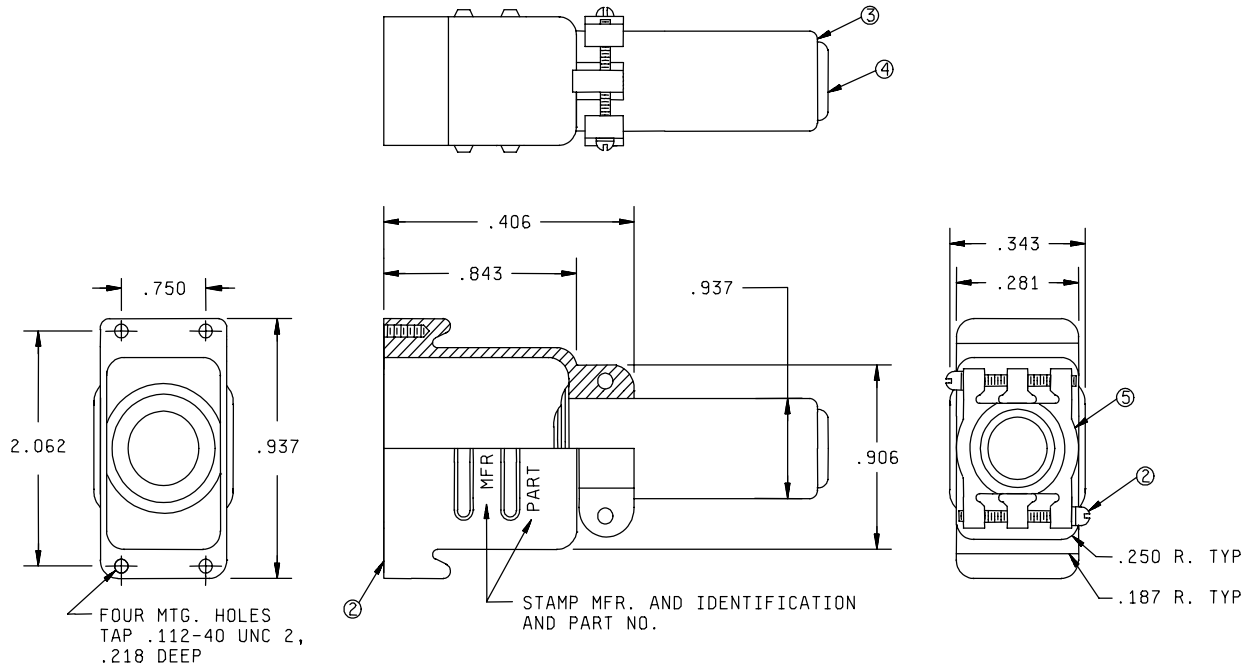


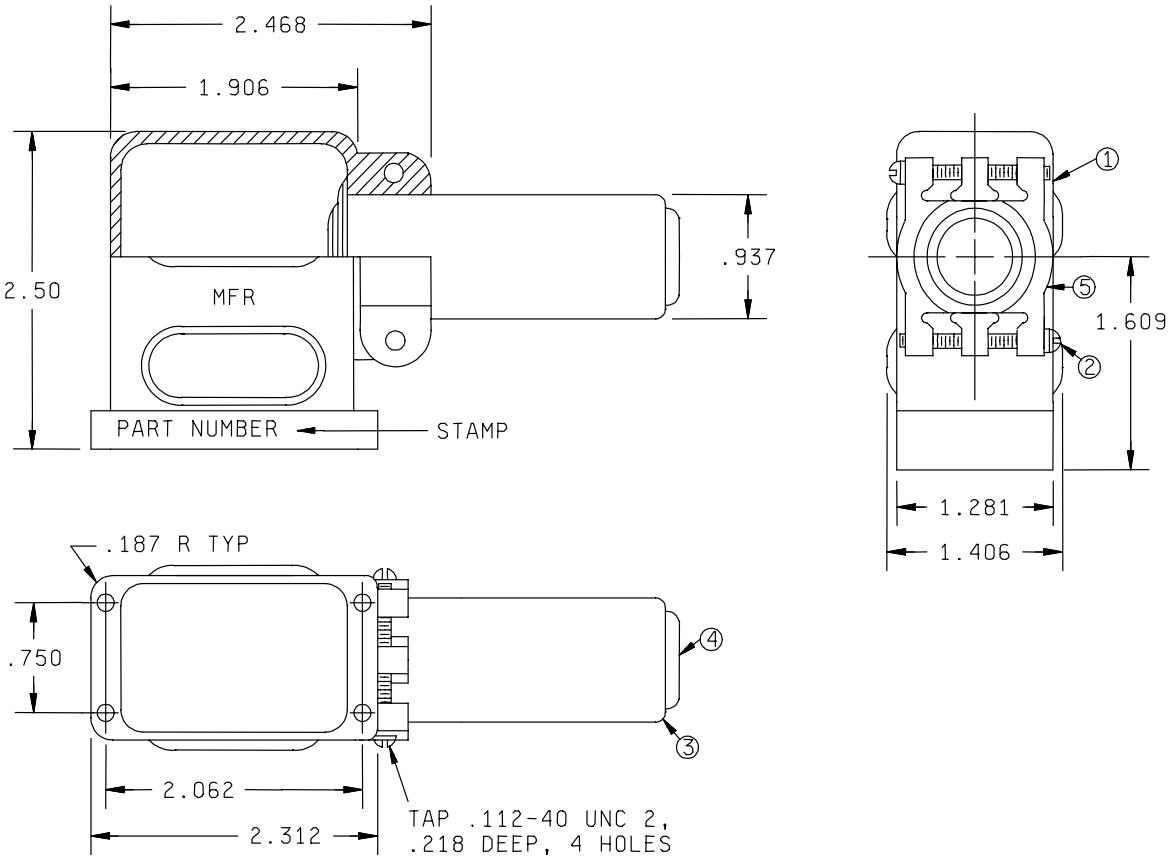
FIGURE 1. Junction shell, straight.

Item	Part	Number required
1	End bell 1.125 inches	1
2	.164-32 x 1.125 FIL HD machine screw	2
3	Bushing	1
4	Bushing	1
5	Clamp, gland	2

Inches	mm	Inches	mm	Inches	mm
.112	2.84	.281	7.14	.843	21.41
.187	4.74	.343	8.71	.906	23.01
.218	5.53	.406	10.31	.937	23.79
.250	6.35	.750	19.05	2.062	52.37

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).

FIGURE 1. Junction shell, straight - Continued.



Item	Part	Number required
1	End bell 1.125 inches	1
2	.164-32 x 1.125 FIL HD machine screw	2
3	Bushing	1
4	Bushing	1
5	Clamp, gland	2

Inches	mm	Inches	mm
.112	2.84	1.281	32 53
.164	4.16	1.406	35.71
.187	4.74	1.609	40.87
.218	5.53	1.906	48.41
.750	19.05	2.062	52.37
.937	23.79	2.312	58.73
1.125	28.58	2.468	62.69
		2.50	63.50

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerance is ±.005 (0.13 mm).

FIGURE 2. Junction shell, 90 degree angle.

REQUIREMENTS:

Dimensions and configurations: See figures 1 and 2.

Reference material: See MIL-DTL-21617.

Shells:

Material: Shells shall be made from high-grade aluminum alloy conforming to SAE-AMS-QQ-A-250/8, temper H-32.

Finish: Cadmium plate in accordance with SAE-AMS-QQ-P-416, type II, class 3. The resultant finish shall be electrically conductive.

Screws:

Material corrosion resisting, in accordance with SAE-AMS-STD-66, AISI 302, 303, 304, 305, 316, 384 (developed for cold heading) or type UNS S30430 in accordance with the chemical requirements of ASTM-A-493.

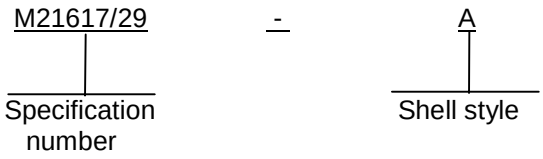
Treatment: Passivation shall be in accordance with SAE-AMS-QQ-P-35.

Magnetic permeability: These screws shall have a magnetic permeability or 2.0 maximum (air = 1.0) for a field strength of H = 200 oersteds, using a magnetic indicator in accordance with ASTM A342.

Threads: Threads shall be in accordance with FED-STD-H28.

Threads: Screws shall have complete threads extending to within two threads of the head, or closer if practicable.

Part or Identifying Number (PIN): PIN example as follows:



Shell Style: A - 90 degree
S - Straight

CONCLUDING MATERIAL

Custodians:
Army – CR
Navy - EC
DLA – CC

Preparing activity:
DLA - CC

(Project 5935-4335-029)

Review activities:
Army - AV, MI